

1. A toy comprising:
1 a plurality of electrically controllable
2 elements; and
3 a controller to selectively actuate said elements
4 to position a play piece in three dimensions without
5 physically contacting said play piece.

1 2. The toy of claim 1 wherein said elements are
2 electromagnets.

1 3. The toy of claim 2 including a three dimensional
2 structure having at least one surface.

1 4. The toy of claim 3 wherein said surface includes
2 a matrix of elements.

1 5. The toy of claim 4 wherein structure is in the
2 form of a rectangular box having at least four walls, each
3 of said walls including an array of electrically
4 controllable elements.

1 6. The toy of claim 5 wherein said box is fluid
2 tight.

1 7. The toy of claim 5 wherein said box contains a
2 liquid.

1 8. The toy of claim 1 including a play piece having
2 a permanent magnet.

1 9. The toy of claim 8 wherein said play piece is
2 neutrally buoyant.

1 10. The toy of claim 1 including a controller to
2 determine the location of said play piece in three
3 dimensions.

1 11. The toy of claim 1 including an input device that
2 enables a user to specify a position of the play piece in
3 three dimensions, said controller adapted to position said
4 play piece in response to a user input command.

1 12. A method comprising:
2 receiving a play piece position command; and
3 in response to receipt of said command,
4 developing a plurality of signals to control electrically
5 controllable elements to position a play piece in three
6 dimensions without physically contacting said play piece.

1 13. The method of claim 12 including applying current
2 to selected electromagnets in a matrix of electromagnets.

1 14. The method of claim 13 including applying current
2 to electromagnets oriented in a three dimensional
3 structure.

1 15. The method of claim 14 including causing said
2 play piece to move in a liquid environment.

1 16. The method of claim 12 including detecting
2 induced currents in said elements in order to locate the
3 position of said play piece.

1 17. The method of claim 16 including converting said
2 induced currents into position signals and displaying the
3 position of said play piece.

1 18. An article comprising a medium storing
2 instructions that enable a processor-based system to:
3 receive a play piece position command; and
4 in response to receipt of said command, develop a
5 plurality of signals to control electrically controllable
6 elements to position a play piece in three dimensions
7 without physically contacting said play piece.

1 19. The article of claim 18 further storing
2 instructions that enable the processor-based system to
3 develop signals to control the current applied to selected

4 electromagnets in a matrix of electromagnets to control the
5 position of the play piece in three dimensions.

1 20. The article of claim 18 further storing
2 instructions that enable the processor-based system to use
3 induced currents in said elements in order to locate the
4 position of said play piece.

1 21. The article of claim 20 further storing
2 instructions that enable the processor-based system to
3 receive information about said induced current, convert
4 said information into position signals, and display the
5 position of a play piece.